

**ABSTRACT OF THE DISCLOSURE**

An automatic ultrasonic frequency calibration scheme is provided to automatically calibrate an ultrasonic frequency device to a resonant frequency by using a logic circuit such as a microcontroller to generate a series of distinct digitally synthesized frequencies, measure the power supply current at one or more terminals of a power amplifier at each frequency step generated by the microcontroller, compare the obtained power supply current readings to one another to determine a current reading indicative of a resonant frequency of a ultrasonic transducer, and set the resonant frequency.